U. S. DEPARTMENT OF AGRICULTURE.

ANNUAL SUMMARY, 1901

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CUBA SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU.

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BY

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HAVANA, CUBA, W. I.
WEATHER BUREAU OFFICE.
1901

U. S. DEPARTMENT OF AGRICULTURE,

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU

CENTRAL OFFICE: WASHINGTON, D. C.

CUBA SECTION

WM. B. STOCKMAN, *Section Director.*

HAVANA, CUBA, W. I.

GENERAL SUMMARY OF METEOROLOGICAL AND CROP CONDITIONS.

The mean annual temperature for Cuba was 76.2° Fahrenheit (24.6° Centigrade), and the average rainfall for the year was 56.20 inches (1427.5 m. m.).

From January to April, inclusive, the rains were light; and during the first seven days of May unusually dry weather prevailed, but on May 8th copious showers began to fall in western Cuba and by the middle of the month the summer rains were general over the entire Island. During June the precipitation was unevenly distributed, but July was generally very showery. With the advent of August there was somewhat of a decrease in the frequency of showers; in September, however, they again became frequent, and in this month the greatest monthly fall during the year occurred at the majority of stations—except those in southern Santiago de Cuba Province; in the latter section phenomenally heavy rains fell from October 13th to 15th, inclusive, making the fall there for the month of October the heaviest monthly. In November excessively dry weather prevailed over the western half of the Island; in the eastern half a few moderate showers fell. The December fall was unevenly distributed and light.

On the early morning of January 27th unusually low temperatures occurred over the entire Island; at some stations the readings reached a lower point than ever before recorded, and at a large number of stations the minimum of the year was registered. During January and February comparatively low temperatures were frequent in the western end of Cuba, but no unusual thermal changes occurred in other sections—except on January 27th. From March to October, inclusive, the temperature variations followed the seasonal changes with a fair degree of regularity; in Santiago de Cuba Province the maximum for the year occurred at no two stations on the same date, but in the other provinces the warmest weather occurred most generally during the first nine days of June. In November and December northerly winds were of frequent occurrence and notably cool weather prevailed during those months:

The tobacco crop of 1900—1901 was not favored by propitious weather conditions during the early part of the past year, and the yield was rather short, but the quality very fair. The crop of 1901—1902 has also been quite unfavorably affected; seed beds were much damaged, or entirely ruined, and the preparation of land retarded by the heavy showers. In Pinar del Rio and Havana provinces rains became less frequent and much lighter about the middle of October; soil preparation progressed rapidly and young plants grew well and were sufficiently abundant by the end of the month—when transplanting had become general; the excessively dry weather during November, however, was very severely felt by both the seed beds and the transplanted crop. In a few localities of central Pinar del Rio, where several showers fell during December, a fairly good yield was realized from the first cutting, but in other sections of that Province and in Havana Province the dry December greatly reduced the estimated return, and at the end of the year the harvest was giving a very discouraging result. Practically the same conditions existed in Santa Clara Province—except that the rains delayed transplanting even more than in the western end of the Island. On the few irrigated and covered *vegas* of Havana and Pinar del Rio most satisfactory results—both as to the yield and quality of the crop—were being obtained.

The cane harvest, preparation of soil and cane planting progressed uneventfully during the early months of the year. Stubble and new cane suffered somewhat from the effects of very dry weather during April and the first part of May, but rapidly revived with the beginning of the rains—about May 10. The heavy summer rains were injurious to lowland canes in various sections, and the succeeding dry fall and winter months were unfavorable for spring and fall plantings. At the end of the year the harvest was in full progress—having begun somewhat earlier than usual on account of the very cool and dry weather during November and December; the yield of cane was falling below estimates in many instances, but the juice density was generally good. Preparation of land and planting were receiving considerable attention, but were, by no means, being carried on with general activity.

DEPARTAMENTO DE AGRICULTURA DE LOS E. U.

SERVICIO CLIMATOLOGICO Y DE COSECHAS

DEL

WEATHER BUREAU

OFICINA CENTRAL: WASHINGTON D. C.

SECCION DE CUBA

WM. B. STOCKMAN, *Director de Sección.*

HABANA, CUBA.

RESUMEN GENERAL DE LAS CONDICIONES METEOROLOGICAS Y DE COSECHAS,

La temperatura media anual en la Isla de Cuba fué 24.6° centígrado (76.2° Fahrenheit y la precipitación término medio, en el año, resultó 1427.5 milímetros (56.20 pulgadas).

Desde principiar Enero hasta finalizar Abril, fueron ligeras las lluvias, y, durante los siete primeros días de Mayo, prevaleció insólito tiempo seco, pero, desde el 9 de Mayo, empezaron á caer copiosos aguaceros en la parte occidental de Cuba, y, á mediados del mismo mes, las aguas de verano llegaron á generalizarse en toda la Isla. La precipitación en Junio resultó desigualmente distribuida, pero el mes de Julio fué, en general, muy lluvioso. Desde principios de Agosto, fueron algo menos frecuentes los chubascos; en Septiembre, sin embargo, volvieron á caer con frecuencia y resultó ser el mes en que ocurrió la mayor precipitación mensual del año en todas las Estaciones del Servicio, menos en las de la parte Sur de la provincia de Santiago de Cuba, pues cayeron en esa región, en el mes de Octubre, desde el 13 hasta el 15, ambos inclusives, lluvias fenomenales, ocurriendo por lo tanto, en Octubre, la mayor precipitación mensual en ese territorio. Durante el mes de Noviembre reinó tiempo excesivamente seco en la mitad occidental de la Isla, y, en la oriental, cayeron pocos y no fuertes chubascos. Las lluvias caídas en Diciembre fueron ligeras y desigualmente distribuídas.

En la madrugada del 27 de Enero, ocurrió extraordinariamente baja temperatura en toda la Isla; en algunas Estaciones, acusaban las observaciones el grado más bajo hasta entonces registrado, y en varias de las Estaciones, resultó la temperatura mínima del año. Ocurrieron con frecuencia, en Enero y Febrero, relativamente bajas temperaturas al extremo occidental de la Isla, pero no hubo cambios extraordinarios de temperatura en otras regiones, sino el 27 de Enero. Desde principio de Marzo hasta fin de Octubre, los cambios de temperatura correspondieron á los que suelen ocurrir en esa época y con bastante regularidad; en las Estaciones de la provincia de Santiago de Cuba, la temperatura máxima del año ocurrió en fechas todas distintas; pero en las demás provincias, se sintió el mayor calor en los primeros nueve días de Junio. En Noviembre y Diciembre, soplaron con frecuencia vientos del Norte y reinó tiempo notablemente fresco durante casi todo esos meses.

No fué favorecida por tiempo propicio la cosecha de tabaco de 1900 á 1901 durante la primera parte de este último año, y resultó algo escaso el rendimiento, pero bastante buena la calidad. También ha sufrido considerablemente la cosecha de 1901 á 1902; se perjudicaron mucho ó se perdieron totalmente los semilleros, y las fuertes lluvias retardaron la preparación de terrenos. En las provincias de Pinar del Río y de la Habana, resultaron las lluvias menos frecuentes y más ligeras á mediados de Octubre; se atendió activamente á la preparación de terrenos y prosperaron los semilleros, que, á fines del mes, ya producían abundancia de posturas, generalizándose entonces las siembras; la excesiva seca en Noviembre llegó, sin embargo, á perjudicar tanto los semilleros como las siembras. En unas pocas localidades de Centro Pinar del Rio, donde cayeron varios chubascos en Diciembre, se obtuvo muy regular rendimiento de primer corte, pero en otras comarcas de esa provincia y en la de la Habana, la seca en Diciembre disminuyó considerablemente el resultado que se esperaba conseguir, y á fin de año, era muy desconsolador el rendimiento que se obtenía. Puede decirse que existieron iguales condiciones en la provincia de Santa Clara, excepto que las aguas retardaron las siembras todavía más tiempo que al extremo occidental de la Isla. En las pocas vegas de regadío y cubiertas de las provincias de la Habana y de Pinar del Río, se ha conseguido resultados altamente satisfactorios tanto en rendimiento como en clase y calidad de la hoja.

La zafra, la preparación de terrenos y las siembras de caña adelantaron favorablemente y sin inconvenientes durante los primeros meses del año. Las cañas de soca y las nuevas sufrieron algo por la gran seca en Abril y á principio de Mayo, pero recobraron lozanía con las primeras aguas, caídas aproximadamente el 10 de Mayo. Las fuertes lluvias de verano fueron perjudiciales á la caña en terrenos bajos de varias comareas, y los meses tan secos de otoño é invierno, que vinieron después, resultaron desfavorables á las siembras de primavera y de frío. A fin de año, la molienda se había generalizado casi en todas partes, habiendo principiado algo más temprano que de costumbre á causa del tiempo tan fresco y muy seco en Noviembre y Diciembre; el rendimiento de los campos de caña resultaba, en varios casos, menos de lo que se había calculado, pero la densidad del guarapo era, en general, buena. Se efectuaron preparación de terrenos y siembras, pero no se practicaban en todas partes con entusiasmo.

Climatological Data for the Year 1901.

STATIONS.	PROVINCES.	Temperature in degrees Fahrenheit.							Precipitation in inches.					Number rainy days.	Sky.			Prevailing direction of wind.	OBSERVERS.
		Annual mean.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Date.	Total for the year.	Greatest monthly.	Month.	Least Monthly.	Month.		Number clear days.	Number partly cloudy days.	Number cloudy days.		
San Cayetano	Pinar del Río	75.6	97	June 9	44	*Dec. 20	43	Mch. 20	50.99	13.70	Sep.	0	*Feb.	46	208	121	36	E.	Sr. Miguel González.
Pinar del Río	,,	75.7	96	June 5	47	Dec. 22	33	Jan. 27	80.47	15.24	May	.25	Nov.	103	119	233	13	N.	Sr. Dr. Eduardo Gomís.
Guanajay	,,	73.6	91	*June 4	49	Dec. 21	26	Dec. 28	71.56	14.58	June	.60	Nov.	155	174	119	72	SE.	Sr. Pedro Núñez y Lostado.
Havana	Havana	75.3	94	June 4	50	Jan. 27	24	*Feb. 18	55.91	9.09	July	.52	Mch.	128	118	179	68	E.	U. S. Weather Bureau.
Batabanó	,,	75.1	101	June 5	44	Jan. 28	32	*Mch. 18	30.83	7.54	Sep.	0	Nov.	59	268	81	16	SE.	Sr. Angel R. Cañas.
"Providencia" (Güines)	,,	‡80.1	93	*May 28	‡ 58	Nov. 13	33	*Nov. 13	63.48	21.15	Sep.	0	*Mch.	83	.....	.....	.....	SE.	Sr. Pascual Goicoechea.
"Rosario" (Aguacate)	,,	76.4	98	June 6	‰ 38	Jan. 27	48	Dec. 27	57.65	9.65	July	.26	Nov.	137	198	117	50	NE.	Sr. Ramón Pelayo.
Matánzas	Matánzas	.....	96	June 9	.....	.....	†43	May. 25	.....	.....	.....	.....	.....	†30	†123	†27	†31	NE.	Sr. Angel Colina.
Unión de Reyes	,,	.....	93	*June 2	.....	....	†32	Apr. 23	.....	.....	.....	.....	.....	†60	†179	†99	†26	NE.	Sr. Félix R. Garayta.
Jagüey Grande	,,	75.5	97	May 8	42	Jan. 28	42	May. 3	54.09	13.56	Sep.	0	Nov.	73	274	65	26	NE.	Sr. Antonio Alvarez Valdés.
Banagüises	,,	74.8	96	June 2	42	Jan. 27	38	*May. 12	64.11	15.37	May	t.	Nov.	80	179	179	7	N.	Sr. Miguel Mendoza.
Alvarez	Santa Clara	.....	.....	.....	.....	....	.....	.....	45.81	11.21	May	0	Nov.	73	.....	.....	.....	.....	Sr. Dr. Carlos Cabello.
"Magdalena" (Cayamas)	,,	.....	95	June 23	42	Jan. 28	†37	May. 7	.....	20.78	Sep.	0	Nov.	†68	.....	.....	.....	NE.	Sr. E. Ferrer.
Cienfuegos	,,	.....	.....	.....	50	Jan. 29	†28	*Jan. 26	.....	.....	....	t.	Nov.	†93	†141	†105	†28	NE.	U. S. Weather Bureau.
"Soledad" (Cienfuegos)	,,	74.3	92	July 1	47	Jan. 28	32	Apr. 21	51.19	13.36	Sep.	0	Nov.	114	97	241	27	N.	A. A. Hughes, Esq.
"Guabairo" (Cienfuegos)	,,	.....	.....	.....	.....	.....	.....	.....	56.84	10.02	Sep.	0	Nov.	123	117	167	81	S.	Capt. P. M. Beal.
Cruces	,,	.....	.....	.....	.....	.....	.....	.....	47.96	10.14	Sep.	0	Nov.	82	239	96	30	N.	Sr. Dr. José Ruibal.
Santa Clara	,,	74.0	98	*May 17	42	Nov. 18	46	May. 7	63.92	14.00	Sep.	t.	Nov.	116	†126	†59	†27	NE.	Sr. Vicente G. Abreu.
Camajuaní	,,	73.4	96	May 8	45	Nov. 19	30	May. 8	60.97	11.87	Oct.	.26	Nov.	142	97	206	62	SE.	Sr. José Mª Espinosa.
Sancti Spíritus	,,	74.6	91	June 5	52	Feb. 22	32	Feb. 22	70.43	16.19	June	.45	Apr.	109	127	161	77	.....	Sr. Juan Ysern Pérez.
Yaguajay	,,	76.4	99	June 1	52	*Jan. 27	35	Jan. 30	66.40	13.97	July	.48	Apr.	118	254	45	66	NE.	Sr. Augusto Venegas.
Morón	Puerto Príncipe	77.8	96	*June 3	45	Jan. 27	37	Mch. 30	55.34	12.31	Sep.	.26	Nov.	70	156	153	56	E.	Sr. Benito Grandal.
Ciego de Avila	,,	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	†64	†45	†100	†24	NE.	Sr. Juan A. Castro Lema.
Puerto Príncipe	,,	76.2	96	*June 8	47	Jan. 27	35	*Jan. 27	54.63	14.90	June	.07	Feb.	133	129	153	83	NE.	U. S Weather Bureau.
Santa Cruz del Sur	,,	.....	93	*July 1	51	Mch. 28	†35	Mch. 28	.....	.....	.....	.....	.....	.....	.....	.....	.....	NE.	Sr. S. Fluriach.
Nuevitas	,,	.....	100	*July 19	52	*Jan. 26	†32	July 2	.....	.....	.....	.....	.....	†58	†181	†40	†47	NE.	Sr. Guillermo Ruíz.
Manzanillo	Stiago. de Cuba	81.1	99	June 2	60	*Mch. 17	25	Mch. 19	48.70	17.52	June	t.	*Apr.	80	167	152	46	NE.	Sres. Beattie & Co.
Holguín	,,	77.6	100	*May 10	49	Jan. 26	39	Apr. 15	37.94	8.41	June	0	Apr.	111	242	53	70	E.	Capt. Luther S. Harvey.
"Santa Lucía" (Gibara)	,,	77.1	96	*Apr. 19	49	Jan. 27	35	Feb. 19	60.82	11.18	Oct.	.20	Apr.	112	128	147	90	NE.	Sr. Jorge J. Hernández.
Santiago de Cuba	,,	78.7	94	Sep. 9	57	Jan. 27	26	Mch. 18	57.59	12.78	Oct.	.27	Apr.	109	141	164	60	N.	U. S. Weather Bureau.
Guantánamo	,,	77.7	96	June 30	46	Jan. 27	35	Jan. 27	52.99	20.11	Oct.	.13	*Feb.	94	153	170	42	S.	Theodore Brooks, Esq.
"Soledad" (Guantánamo)	,,	77.0	94	*June 26	44	Jan. 27	40	Jan. 27	60.39	20.81	Oct.	t.	Feb.	90	125	160	80	.....	Earnest A. Brooks, Esq.
"Isabel"	,,	.....	.....	.....	.....	.....	.....	.....	56.81	16.19	Oct.	.17	Apr.	80	.....	.....	.....	.....	C. A. Knowlton, Esq.
"Romelie"	,,	.....	.....	.....	.....	.....	.....	.....	50.00	13.68	Oct.	.15	Dec.	85	.....	.....	.....	.....	Sr. A. Taupier.
"Caños"	,,	77.4	97	*Sep. 11	43	Jan. 27	41	Feb. 10	42.75	17.40	Oct.	.10	*Feb.	72	208	68	89	.....	Sr. Pablo Odoardo.
"Bella Vista" (Yateras)	,,	.....	.....	.....	.....	.....	.....	.....	59.13	16.11	Oct.	.32	Dec.	99	.....	.....	.....	.....	Sr. Octavio Bégué.

* And subsequently.

† Record incomplete.

* También después.

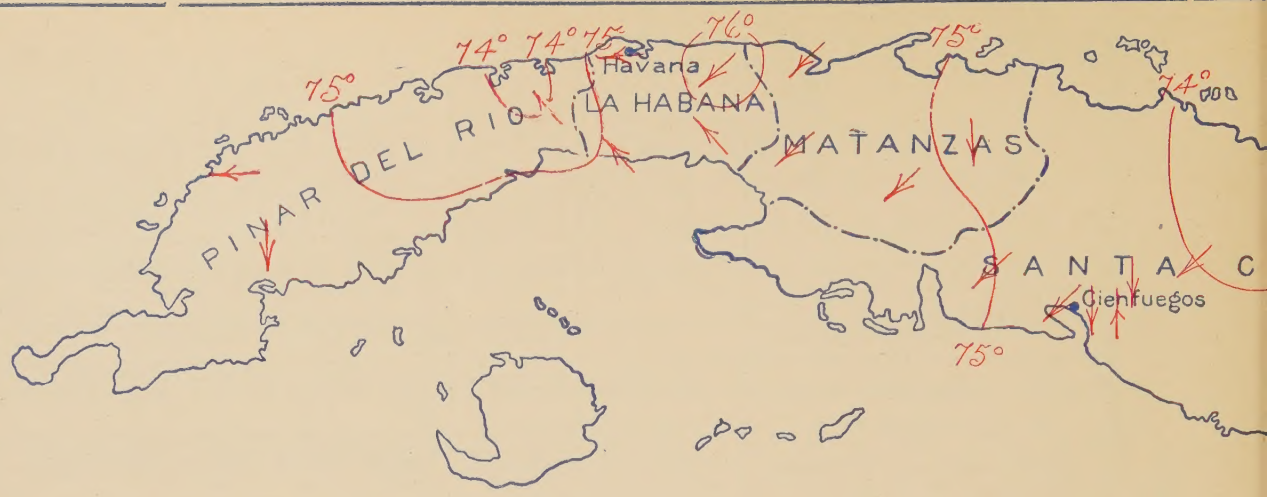
† Anotación incompleta.

‡ Considered too high.

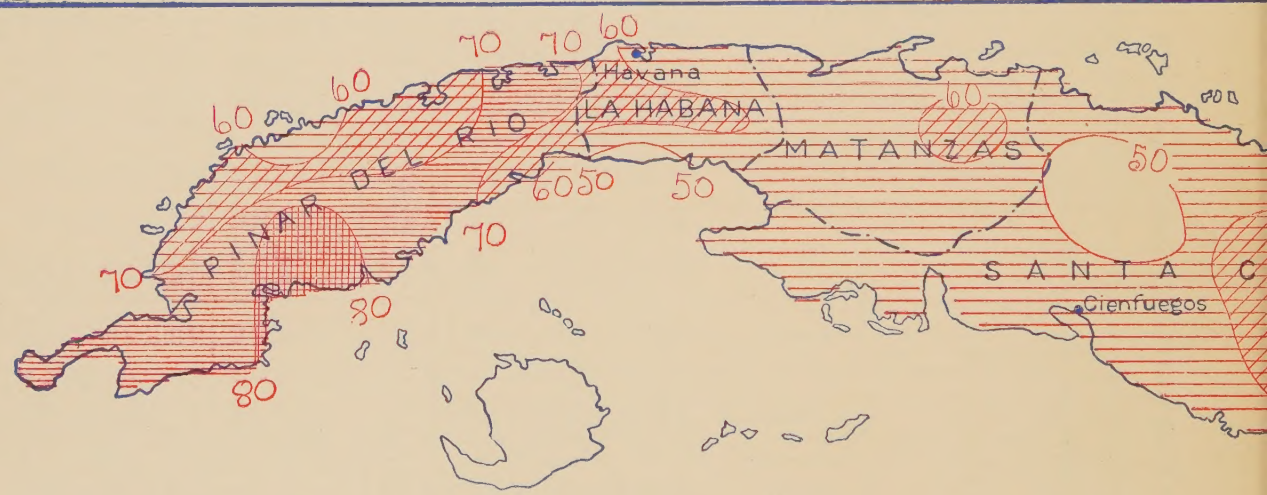
‰ Considered too low.

‡ Considerado demasiado alta.

‰ Considerado demasiado baja.



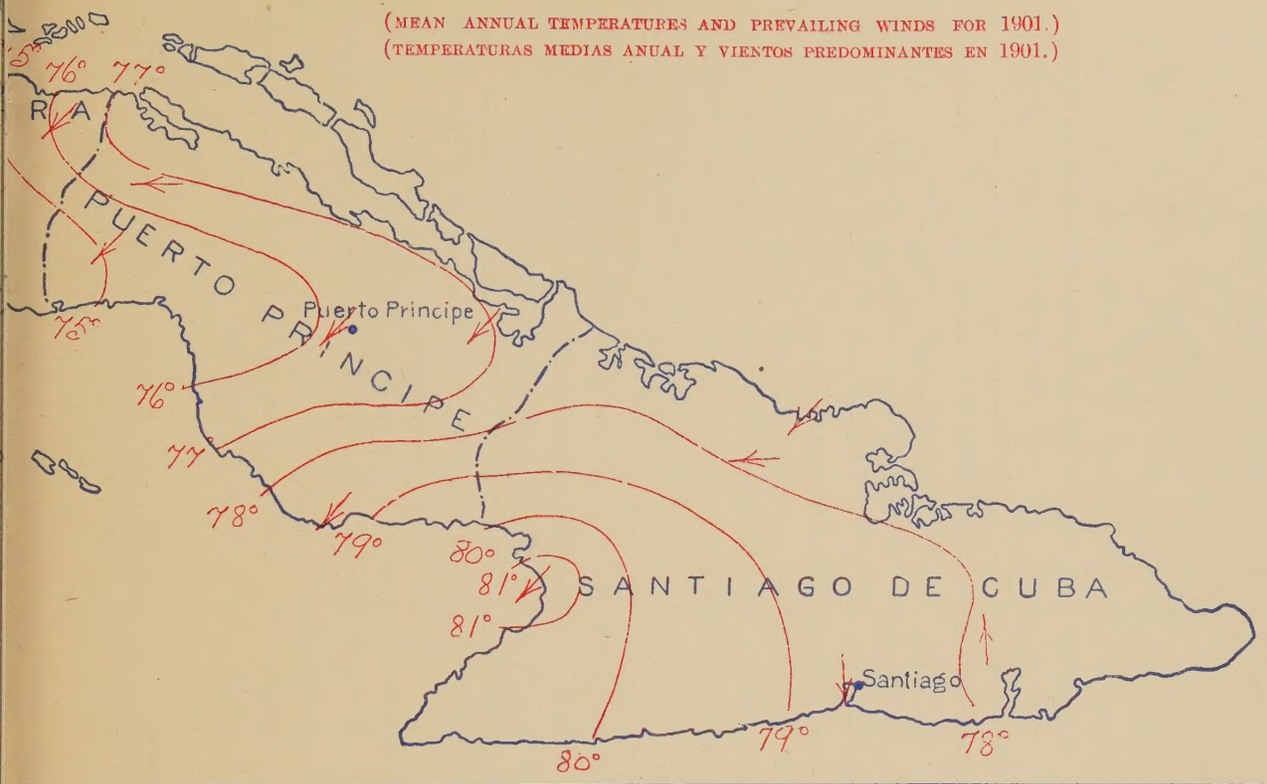
(Lines pass through points of equal temperature; arrows fly with the wind.)
(Las líneas marcan iguales temperaturas: las flechas la dirección del viento.)



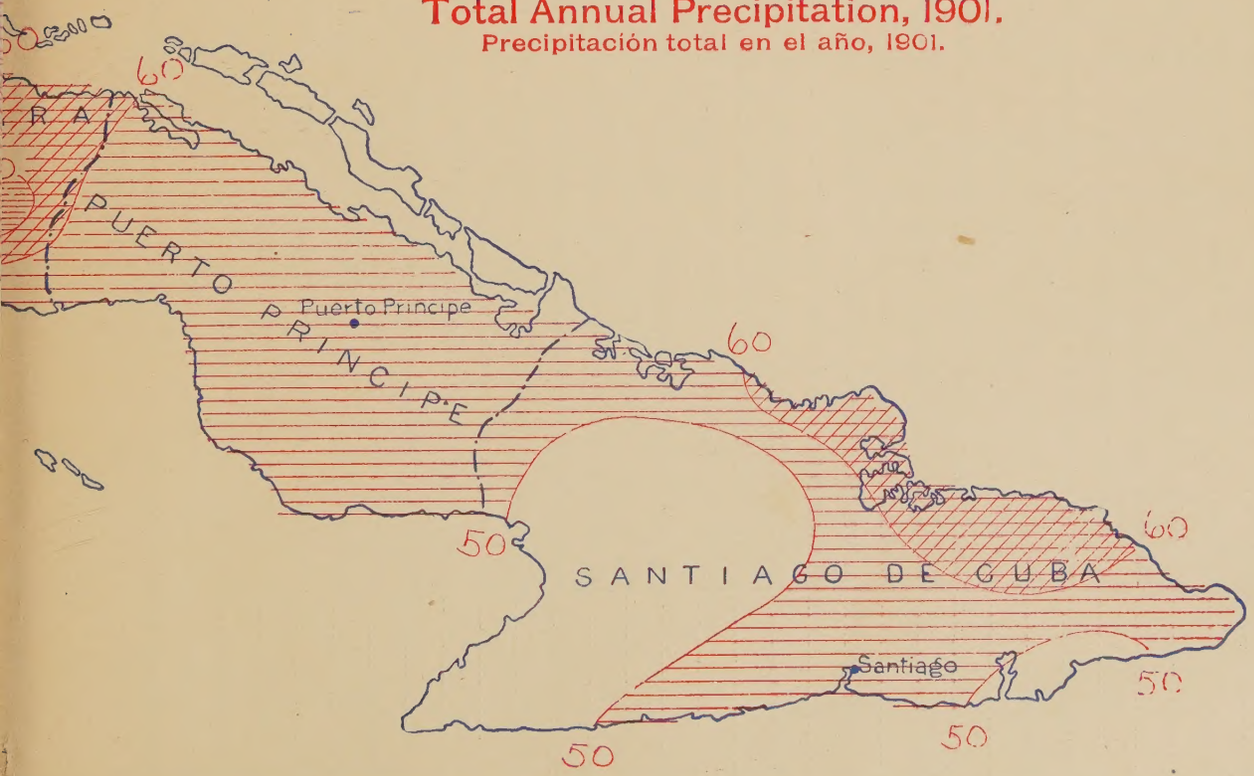
Scale of Shades--*in inches.*
Escala de sombras—en pulgadas.

0 to 50	50 to 60	60 to 70	70 to 80	Over 80
0 á 50	50 á 60	60 á 70	70 á 80	Más de 80

(MEAN ANNUAL TEMPERATURES AND PREVAILING WINDS FOR 1901.)
(TEMPERATURAS MEDIAS ANUAL Y VIENTOS PREDOMINANTES EN 1901.)



Total Annual Precipitation, 1901.
Precipitación total en el año, 1901.



Monthly and Annual Mean Temperatures for the Year 1901.

STATIONS.	JANUARY.			FEBRUARY.			MARCH.			APRIL.			MAY.			JUNE.			JULY.			AUGUST.			SEPTEMBER.			OCTOBER.			NOVEMBER.			DECEMBER.			ANNUAL.		
	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.	Maximum.	Minimum.	Mean.
San Cayetano	80.5	61.1	70.8	86.7	59.6	73.2	86.3	57.5	71.9	88.1	61.5	74.8	87.7	64.0	75.8	92.1	70.1	81.1	90.9	70.4	80.6	91.8	71.0	81.4	91.9	70.6	81.2	88.1	67.8	78.0	84.0	57.1	70.6	76.8	59.2	68.0	87.1	64.2	75.6
Pinar del Río	78.5	59.1	68.9	80.5	61.7	71.1	81.9	63.3	72.6	84.9	63.1	74.0	87.6	68.2	77.9	88.7	74.2	81.4	89.1	73 4	81.2	89.4	73.5	81.5	87.7	74.0	80.8	86.0	71.4	78.7	80.7	61.1	70.9	77.0	61.3	69.2	84.3	67.0	75.7
Guanajay	75.4	60.4	67.9	77.8	62.0	69.9	79.3	63.6	71.4	80.8	65.0	72.9	84.4	68.6	76.5	85.1	70.1	77.6	85.7	70.4	78 0	86.8	70.0	78.4	85.9	69.3	77.6	83.3	67.8	75.6	77.3	61.9	69.6	76.2	59 5	67.8	81.5	65.7	73.6
Havana	76.2	64.0	7 0.1	78.2	64.6	71.4	79.3	65.3	72.3	78.5	66.0	72.2	83.4	68 7	76.0	86.0	74.1	80.0	86.8	74.0	80.4	87.7	74.3	81.0	86.6	74.2	80.4	83.2	74.0	78.6	77.1	66.0	71.6	76.5	63.7	70.1	81.6	69.1	75.3
Batabanó	76.2	58.3	67.2	77.9	60.5	69.2	79.5	61.1	70.3	85.3	61.7	73.5	89.6	66.0	77.8	92.6	72.3	82.4	94.0	72.4	83.2	93.2	72.2	82.7	88.2	72.3	80.2	85.0	69.8	77.4	79.1	60.1	69.6	75.5	59.5	67.5	84.7	65.5	75.1
"Providencia" (Güines) ‡	89.0	71.2	80.1	89.2	79.8	84.5	91.3	81.0	86.2	90.6	80.9	85.8	87.9	66.0	77.0	90.3	64.8	77.6	90.2	73.3	81.7	90.6	72.5	81.6	88.8	68.3	78.6	80.8	67.3	74.0	85.3	62.4	73.8	89.5	70.6	80.0	88.6	71.5	80.1
"Rosario" (Aguacate)	79.5	55.6	67.6	81.0	57.8	69.4	83.8	59.6	71.7	84.5	56.8	70.6	89.2	74.6	81.9	89.8	78.7	84.2	91.1	77 0	84.4	92.3	78.3	85.3	89.4	75.9	82.6	86.6	74.4	80.5	80.6	59.7	70.2	84.7	52.1	68.4	86.0	66.7	76.4
Matanzas	80.0	56.2	68.1	81.4	57 .2	69.3	83.8	61.1	72.4	83.8	57.8	70.8	86.4	59.2	72.8	89.1	64.6	76.8	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....
Union de Reyes	76.8	65.1	71.0	74.1	65.6	69.8	79.7	67.5	73.6	84.4	65.9	75.2	86.8	69.9	78.4	87.5	75.8	81.6	88.8	75.4	82.1	90.0	76.4	83.2	87.4	75.5	81.4	....	....	....	....	....	....	78.5	64.9	71.7	....	....	....
Jagüey Grande	81.1	55.6	68.4	82.8	60.3	71.6	85.1	60.7	72.9	87.0	60.1	73.6	91.2	67.1	79.2	90.1	72.5	81.3	91.2	71.1	81.2	91.4	71.3	81.4	88.6	71.5	80.0	86.9	69.6	78.2	82.9	56.1	69.5	79.6	58.8	69.2	86.5	64.6	75.5
Banagüises	81.0	58.5	69.8	81.4	58.8	70.1	85.0	63.2	74.1	84.9	62.1	73 5	87.7	61 3	74.5	90.6	69.3	80.0	88.5	69.4	78.9	89.7	70.2	79.9	89.7	68.6	79.2	87.4	66.6	77.0	80.9	60.5	70.7	78.2	61.4	69.8	85.4	64.2	74.8
"Magdalena" (Cayamas)	79.7	75.6	86.6	83.0	61.9	72.4	83.8	61.1	72.4	86.2	60.3	73.2	88.8	65.8	77.3	87.0	72.1	79.6	....	....	....	....	....	....	....	....	....	....	....	....	79.0	58.3	68.6	77.3	61 8	69.6	....	....	....
Cienfuegos	80.0	59.8	69.9	80.0	61 .5	70 8	82.1	63.4	72.8	....	....	....	....	....	....	....	....	....	88.8	72.9	80.7	89.3	73.2	81.2	86.2	73.0	79.6	86.3	71.8	79.0	81.1	62.4	71.8	78.7	64.5	71.6	....	....	....
"Soledad" (Cienfuegos)	79.5	59.0	69.2	80.7	59.7	70.2	82.8	60.8	71.8	85.0	60.6	72.8	87.3	65.8	76.6	87.2	71.2	79.2	88.5	70.3	79.4	89.5	68.9	79.2	86.5	69.5	78.0	86 4	68.7	77.6	78.5	56.7	67.6	78.6	61.3	70.0	84.2	64.4	74.3
Santa Clara	80.7	57.0	68.8	83.7	57.9	70.8	85.6	59.4	72.5	91.0	54.5	72.8	92.4	60.4	76.4	88.6	70.3	79.4	89.5	69.7	79.6	90.3	67.8	79.0	90.2	65.4	77.8	84.1	62.7	73.4	76.3	56.3	66.3	79.6	61.6	70.6	86.0	61.9	74.0
Camajuaní	76.7	57.3	67.0	79.2	58.3	68.8	82.5	61.0	71.8	83.2	58.9	71.0	88.1	64.3	76.2	86.7	69.1	77.9	87.1	67.4	77.2	89.2	66.9	78.0	87.7	67.4	77.6	87.1	67.1	77.1	82.1	62.0	72 0	72.0	59.7	65.8	83.5	63.3	73.4
Sancti-Spíritus	78.9	66.4	72.6	78.6	66.0	72.3	81.0	65.7	73.4	82.8	65.2	74.0	81.6	69.1	75.4	80.9	73.7	77.3	82.9	73.5	78.2	83.9	74.1	79.0	79.8	73.8	76.8	81.9	72.5	77.2	75.0	63.3	69.2	74.2	64.7	69.4	80.1	69.0	74.6
Yaguajay	81.4	60.8	71.1	84.0	61.4	72.7	85.9	63.3	74.6	86.4	63.1	74.8	91.1	67.4	79.2	89.1	71.6	80.4	89.2	71.6	80.4	91.0	72.5	81.8	89.0	73.0	81.0	86.3	71.7	79.0	79.1	63.0	71.0	77.9	63.5	70.7	85.9	66.9	76.4
Morón	82.7	60.3	71.5	87.9	59.6	73.8	89.5	61.3	75.4	89.1	60.5	74.8	90.6	62.6	76.6	94.0	67.3	80.6	93.5	70.3	81.9	94.4	69.4	81.7	94.1	69.5	81.8	92.7	68.4	80.6	88.2	68.5	78.4	86.0	66.5	76.2	90.2	65.4	77.8
Puerto Príncipe	80.5	58.9	69.7	84.8	60.8	72.8	86.1	63.2	74.7	87.5	62.2	74.8	91.0	66.7	78.8	88.6	71.7	80.1	89.2	71.1	80.2	90.5	71.6	81.0	88.2	71.9	80.0	85.8	70.3	78.0	80.7	63.5	72.1	80.2	64.4	72 3	86.1	66.4	76.2
Santa Cruz del Sur	82.5	63.4	73.0	80.8	60.1	70.4	82.7	60.9	71.8	83.8	64.1	74.0	84.7	68.0	76.4	86.8	71.8	79.3	90.9	71.3	81.1	90.0	71.2	80.6	87.5	72.2	79.8	86.0	69.5	77.8	87.7	58.9	73.3	....	....	....	....	....	....
Nuevitas	71.0	64.6	67.8	88.8	65.0	76.9	89.1	67 .5	78.3	91.3	70.3	80.8	94.7	71.3	83.0	95.3	71.3	83.3	97.0	74.3	85.6	97.0	80.1	88.6	95.3	74.9	85.1	94.1	72.4	83.2	....	....	....	....	....	....	....	....	....
Manzanillo	83.4	73.7	78.6	84.1	69.0	76.6	87.3	68.1	77.7	89.2	75.2	82.2	90.6	79.0	84.8	91.2	77.9	84.6	89.7	77.4	83.6	91.6	77.7	84.6	89.3	76.1	82.7	88.1	74.5	81.3	84.4	72.7	78.6	83.8	70.9	77.4	87.7	74.4	81.1
Holguín	81.1	62.3	71.7	85.8	64.7	75.2	85.7	62.1	73.9	88.6	63.5	76.0	90.9	68.5	79.7	89.6	72.6	81.1	89.9	72.2	81.0	93.5	72.5	83.0	90.5	72.7	81.6	87.5	71.2	79.4	82.1	66.3	74.2	81.8	66.9	74.4	87.2	68.0	77.6
"Santa Lucía" (Gibara)	80.3	62.0	71.2	83.7	63.6	73.6	84.5	65.1	74.8	84.5	65.6	75.0	88.6	66.8	77.7	90.1	72.5	81.3	90.4	72.0	81.2	92.0	71.6	81.8	91.8	72.5	82.2	86.6	70.8	78 7	79.9	66.4	73.2	81.3	67.1	74.2	86.1	68.0	77.1
Santiago de Cuba	84.9	65.8	75.4	86.0	67.2	76.6	86.2	68.4	77.3	87.8	69.5	78.6	88.4	71.3	79 8	89.5	74.0	81.8	90.0	73.3	81.6	91.2	73.9	82.6	88.0	73.0	80.5	86.8	71.9	79.4	83.2	68 .6	75.9	82.8	67.9	75.4	87.1	70.4	78.7
Guantánamo	84.8	59.9	72.4	87.0	60.8	73.9	86.8	64.2	75.5	88.7	64.7	76.7	90.3	67.1	78.7	91.1	71.6	81.4	91.9	70.8	81.4	91.8	70.4	81.1	89.7	71.2	80.4	88.8	70.3	79.6	86.5	65.7	76.1	85.7	65.3	75.5	88.6	66.8	77.7
"Soledad" (Guantánamo)	86.8	58.6	72.7	88.9	58.9	73.9	88.3	61.6	75.0	89.6	61.5	75.6	89.5	64.8	77.2	90.8	69.4	80.1	90.8	68.7	79.8	91.4	68.7	80.0	90.9	68.6	79.8	89.6	68.5	79.0	87.8	64.3	76.0	87.5	62.7	75.1	89.3	64.7	77.0
"Los Caños" (Guantánamo)	86.9	57.9	72.4	88.1	58.1	73.1	89.2	60 7	75.0	90.4	62.4	76 4	91.1	63.6	77.4	90.9	69.6	80.2	92.7	68.2	81.5	93.1	67.9	80.5	91.9	70.2	81.0	90.9	68.9	79.9	88.0	64.7	76.4	87.5	62.9	75.2	90.1	64.6	77.4

‡ Temperatures considered too high. ‡ Temperaturas consideradas demasiado altas.

Monthly Maximum Temperatures for the Year 1901, with Dates.

STATIONS.	January		February		March		April		May		June		July		August		September		October		November		December	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
San Cayetano	91	2	94	14	94	31	96	3	95	* 7	97	9	93	25	94	16	95	*17	96	1	95	8	89	14
Pinar del Rio	85	2	88	26	89	27	90	* 6	90	* 3	96	5	93	2	92	* 9	91	11	90	1	87	1	83	*13
Guanajay	83	2	86	*12	86	31	87	2	89	* 7	91	* 4	90	16	90	* 6	89	*10	87	* 2	82	4	82	*13
Havana	85	1	87	11	87	13	88	1	90	8	94	4	89	13	92	17	91	17	88	12	82	23	85	14
Batabanó	80	* 1	83	10	86	25	88	* 9	96	23	101	5	99	15	97	17	96	11	89	3	88	10	81	14
"Providencia" (Güines)	90	* 1	92	* 9	93	20	92	*16	93	*28	93	* 1	92	*22	94	*13	90	* 7	89	* 2	92	*14	94	*22
"Rosario" (Aguacate)	90	* 1	91	*10	91	29	94	1	96	6	98	6	95	26	96	21	94	* 1	93	1	88	4	95	27
Matanzas	87	* 6	90	12	91	*24	94	19	95	25	96	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Unión de Reyes	87	5	85	*12	90	31	90	* 1	92	* 8	93	* 2	92	1	93	21	91	* 1	.....	.....	.....	.....	87	* 7
Jagüey Grande	87	* 2	90	*11	91	31	92	* 2	97	8	96	* 1	94	3	94	* 5	94	* 3	90	12	89	7	87	14
Banagüises	89	* 1	92	12	91	27	92	18	92	31	96	2	92	11	92	16	92	* 1	92	1	88	1	81	* 6
"Magdalena" (Cayamas)	88	1	89	*11	92	12	90	10	94	6	95	23	.....	.....	.....	.....	.....	.....	.....	.....	86	3	86	15
Cienfuegos	86	1	86	10	88	28	.....	.....	.....	.....	.....	.....	93	1	94	7	92	13	92	13	87	6	85	25
"Soledad" (Cienfuegos)	86	* 2	88	11	88	11	90	9	90	*13	94	5	92	1	91	* 3	91	1	90	2	85	* 1	86	2
Santa Clara	89	12	93	12	94	14	92	* 2	98	* 7	98	* 8	92	* 2	93	27	96	20	92	1	82	* 4	89	*10
Camajuaní	84	*11	88	12	92	*24	92	2	96	8	95	* 1	92	28	91	10	90	3	89	* 7	89	* 3	85	2
Sancti Spíritus	87	* 1	84	22	88	29	89	6	89	31	91	5	88	* 1	90	*16	85	18	87	15	82	5	84	14
Yaguajay	90	31	93	12	95	*25	96	* 2	98	* 9	99	1	91	* 1	96	17	94	* 3	93	6	86	6	89	3
Moron	90	1	93	10	95	*23	96	* 2	95	20	96	* 3	96	28	96	* 3	96	* 6	95	12	92	3	92	14
Puerto Príncipe	86	14	92	9	94	21	94	8	96	8	96	1	92	25	93	10	93	10	89	1	87	23	87	16
Santa Cruz del Sur	87	8	85	6	86	*27	89	*27	87	*21	90	* 8	93	* 1	92	*14	91	*12	88	30	.....	.....	.....	.....
Nuevitas	80	* 1	92	17	96	28	96	* 4	98	*10	97	*16	100	19	100	* 3	100	1	98	3	.....	.....	.....	.....
Manzanillo	89	* 2	87	6	94	*20	94	19	98	31	99	2	96	14	95	17	94	12	92	12	89	7	89	4
Holguin	85	* 1	93	19	98	23	98	15	100	*10	98	3	95	26	97	*16	96	1	93	3	89	5	91	16
"Santa Lucia" (Gibara)	90	17	94	19	92	27	96	19	96	10	94	*15	95	8	95	27	96	5	95	3	86	23	89	29
Santiago de Cuba	89	2	89	10	92	22	93	10	91	31	92	30	93	13	94	1	94	9	90	28	87	13	87	3
Guantánamo	89	* 3	91	*10	92	29	92	* 8	93	*13	96	30	95	14	95	16	95	* 8	93	28	92	13	89	* 3
"Soledad" (Guantánamo)	91	* 2	93	*13	94	23	94	8	92	* 4	94	26	93	*15	95	30	94	8	94	12	91	* 6	92	5
"Los Caños" ,,	91	* 3	92	*10	92	*21	94	15	95	11	95	24	96	* 1	97	16	97	*11	94	* 6	92	6	91	* 3

Monthly Minimum Temperatures for the Year 1901, with Dates.

STATIONS.	January		February		March		April		May		June		July		August		September		October		November		December	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
San Cayetano	49	27	50	2	49	20	55	4	55	1	63	5	68	5	69	4	69	*26	60	15	50	*10	44	*20
Pinar del Rio	50	29	51	*25	49	18	55	5	57	1	71	19	70	29	71	2	72	* 8	66	* 5	52	19	47	22
Guanajay	52	*18	52	24	51	17	59	*21	61	1	64	29	67	*30	64	30	66	*26	65	* 7	56	18	49	21
Havana	50	27	56	23	55	18	56	5	59	1	71	20	70	30	69	30	72	27	70	26	58	18	56	21
Batabanó	44	28	52	23	42	18	56	26	56	2	69	*10	69	28	68	4	70	* 3	64	*13	51	*17	47	22
"Providencia" (Güines)	67	26	78	*15	79	* 1	79	* 3	62	*24	60	16	69	3	67	27	67	25	66	* 6	58	*13	62	16
"Rosario" (Aguacate)	38	27	45	23	44	18	46	5	50	1	72	28	71	*12	68	26	72	8	71	*25	40	*22	43	*19
Matanzas	40	28	46	26	50	4	42	23	52	25	57	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Union de Reyes	53	27	56	23	61	16	50	23	60	1	72	*11	73	8	72	13	72	15	.....	.....	.....	.....	57	*25
Jagüey Grande	42	28	52	* 2	48	18	49	5	54	3	69	17	68	29	70	* 3	66	3	63	31	46	*19	49	*24
Banagüises	42	27	48	23	55	* 3	51	*16	51	12	63	25	63	1	68	*14	65	* 5	64	22	57	*19	57	21
"Magdalena" (Cayamas)	42	28	50	23	46	16	52	* 4	56	7	71	*19	.....	.....	.....	.....	.....	.....	.....	.....	49	17	49	21
Cienfuegos	50	29	51	22	52	18	.....	.....	.....	.....	.....	.....	69	29	71	5	69	27	69	21	53	18	53	22
"Soledad" (Cienfuegos)	47	28	49	20	49	16	53	21	58	3	69	*17	67	28	67	* 4	67	26	65	8	48	* 7	50	21
Santa Clara	45	27	46	22	51	17	50	* 6	50	1	64	9	62	* 1	60	*30	60	*15	60	* 9	42	18	53	22
Camajuaní	48	26	47	21	51	17	51	29	55	2	64	30	65	*16	65	* 2	65	*18	65	* 2	45	19	51	22
Sancti Spíritus	57	29	52	22	59	16	60	24	60	2	71	* 9	71	29	70	1	71	27	71	* 9	54	20	55	*22
Yaguajay	52	*27	53	22	57	17	58	23	58	2	69	* 9	69	* 2	70	*10	71	* 6	69	21	54	17	54	1
Moron	45	27	53	6	54	29	55	12	58	* 8	61	2	68	* 3	66	27	67	* 1	66	31	65	1	57	31
Puerto Príncipe	47	27	52	22	52	17	55	30	56	11	66	22	69	29	68	1	69	14	68	11	52	18	52	31
Santa Cruz del Sur	52	*25	58	* 2	51	28	58	30	58	3	70	* 4	70	* 1	71	* 1	70	19	62	31	.....	.....	.....	.....
Nuevitas	52	*26	60	* 5	60	17	62	28	69	* 3	70	* 3	69	10	72	*25	71	* 8	69	24	.....	.....	.....	.....
Manzanillo	69	*29	63	22	60	*17	65	1	76	* 1	71	17	74	6	70	26	73	17	72	8	69	27	66	23
Holguin	49	26	59	* 4	59	17	59	15	59	2	69	17	68	28	69	11	70	*13	64	9	57	18	63	*27
"Santa Lucia" (Gibara)	49	27	56	5	58	4	56	25	55	2	69	23	69	13	68	* 1	69	18	69	* 6	58	18	61	28
Santiago de Cuba	57	27	63	5	58	18	64	12	65	2	71	17	70	2	72	7	68	28	69	11	61	18	64	14
Guantánamo	46	27	55	* 4	56	18	57	12	61	2	69	*25	68	* 8	68	1	69	9	67	*10	57	18	62	* 8
"Soledad" (Guantánamo)	44	27	54	* 5	53	*18	53	13	56	5	66	25	65	30	66	* 8	66	* 1	65	* 9	58	* 5	59	* 9
"Los Caños" ,,	43	27	50	6	49	18	53	12	56	*17	62	16	60	25	62	11	67	12	64	13	55	18	58	10

* Also occurred subsequently.

* También en días subsecuentes.

Monthly and Annual Precipitation for the Year 1901.

STATIONS.	January	February	March	April	May	June	July	August	September	October	November	December	Annual
San Cayetano	1.15	0	.95	1.20	9.00	4.65	7.30	2.35	13.70	10.19	0	.50	50.99
Pinar del Río	1.43	1.34	1.61	2.55	15.24	14.73	10.22	11.54	14.92	4.81	.25	1.82	80.47
Guanajay	2.73	1.71	1.27	.90	14.22	14.58	8.10	10.96	12.18	3.51	.60	.80	71.56
Havana	8.44	1.52	.52	.55	10.10	6 55	9.09	6.63	4.98	5.45	.95	1.13	55.91
Batabanó	.80	1.18	1.35	.17	7.17	5.79	3.44	2.55	7.54	.66	0	.18	30.83
"Providencia" (Güines)	1.62	1.37	0	0	9.81	9.98	12.93	5.71	21.15	0	0	.91	63.48
"Rosario" (Aguacate)	1.91	2.58	1.48	.83	8.89	6.50	9.65	9.04	8.33	7.74	.26	.44	57.65
Matánzas	1.35	.60	1.54	1.33	20.27	6.00	.....	.....	.....	.....	.....	.....	.....
Unión de Reyes	.89	1.83	.75	.70	11.60	10.66	5.18	6.14	11.51	.....	.....	1.36	.....
Jagüey Grande	.47	1.54	1.82	.69	10.03	8.87	8.66	3.28	13.56	2.39	0	2.78	54.09
Banagüises	1.87	1.35	2.55	1.45	15.37	7.09	13.45	4.50	12.25	2.05	t.	2.18	64.11
Alvarez	1.92	1.40	1.85	1.25	11.21	5.76	4.74	5.99	5.97	4.12	0	1.60	45.81
"Magdalena" (Cayamas)	.75	2.79	1.78	1.05	16.65	13.77	8.89	.....	20.78	1.23	0	1.42	.....
Cienfuegos	1.84	3.07	1.71	.....	.....	.....	6.41	2.78	14.14	2.43	t.	1.79	.....
"Soledad" (Cienfuegos)	1.61	2.54	1.61	.28	6.03	6.99	8.34	7.25	13.36	1.52	0	1.66	51.19
"Guabairo" (Cienfuegos)	2.65	1.65	1.50	.17	7.87	8.55	11.25	7.37	10.02	4.23	0	1.58	56.84
Cruces	1.12	1.72	1.70	.43	7.90	7.27	7.63	7.52	10.14	1.49	0	1.04	47.96
Santa Clara	.46	1.94	.41	.06	3.81	9.01	13.59	7.03	14.00	11.62	t.	1.99	63.92
Camajuaní	1.22	1.61	.44	.57	6.78	7.63	11.65	5.15	11.34	11.87	.26	2.45	60.97
Sancti Spíritus	1.12	2.60	1.36	.45	14.21	16.19	9.76	5.31	15.92	1.30	.93	1.28	70.43
Yaguajay	.68	2.04	.93	.48	7.04	11.58	13.97	4.97	12.51	8.20	.80	3.20	66.40
Morón	.50	1.45	1.50	.65	5.18	10.72	6.98	6.75	12.31	7.40	.26	1.64	55.34
Ciego de Avila	.....	.....	.....	.....	.....	5.20	.....	6.06	11.15	4.00	.10	1.92	.....
Puerto Príncipe	.22	.07	1.64	.50	6.50	14.90	11.63	2.50	8.59	7.23	.33	.52	54.63
Santa Cruz del Sur	.....	.....	.....	.40	2.18	10.45	9.58	4.64	14.00	4.58	.....	.....	.....
Nuevitas	.47	.43	2.21	.94	4.76	12.29	2.50	.44	3.20	5.93	.....	.....	.....
Manzanillo	.55	1.25	1.18	t.	1.99	17.52	8.84	4.05	7.25	5.26	t.	.81	48.70
Holguín	.95	1.03	.15	0	5.97	8.41	2.94	.87	4.57	6.34	1.21	5.50	37.94
"Santa Lucía" (Gibara)	2.77	1.40	1.32	.20	10.47	5.35	5.00	2.08	6.41	11.18	8.25	6.39	60.82
Santiago de Cuba	3.46	.85	1.66	.27	5.19	6.72	9.82	2.71	11.10	12.78	.49	2.54	57.59
Guantánamo	.42	.13	1.17	.13	8.95	2.27	4.22	3.56	9.48	20.11	1.98	.57	52.99
"Soledad" (Guantánamo)	1.68	t.	2.94	.34	13.01	3.60	6.35	1 85	7.63	20.81	1.66	.52	60.39
"Isabel" ,,	1.15	.92	1.90	.17	8.72	4.00	6 62	4.73	10.27	16.19	1.86	.28	56.81
"Romelie" ,,	1.54	2.89	1.03	.47	7.80	2.54	5.83	4.62	8.77	13.68	.68	.15	50.00
"Los Caños" ,,	.89	.10	1.43	.30	7.05	1.19	2.76	3.38	6.43	17.40	.70	1.12	42.75
"Bella Vista" (Yateras)	.89	.66	1.27	.50	8.38	4.01	6.83	6.20	12.69	16.11	1.27	.32	59.13

Barometer reduced to Sea-level and Standard Gravity and Temperature

STATIONS	Mean	Extremes			
		Highest	Date	Lowest	Date
Havana	29.99	30.42	Jan. 19	29.68	May 21
Cienfuegos †	29.98	30.38	Jan. 19	29.68	Oct. 3
Puerto Príncipe	29.98	30.34	Jan. 19	29.76	Oct. 3
Santiago de Cuba	29.95	30.25	Jan. 19	29.69	Sept. 13

Wind (miles)

STATIONS	Prevailing direction	Total movement in miles	Maximum Velocity	Direction	Date
Havana	E.	98,130	48	E.	July 6
Cienfuegos †	NE.	45,401	32	SW.	Sep. 9
Puerto Príncipe	NE.	60,974	*36	E.	July 20
Santiago de Cuba	N.	42,272	54	SE.	Sep. 13

†Record incomplete.

*Also occurred subequently.

Barometro reducido al nivel del Mar y á 0°, y correjido por la Gravedad

ESTACIONES	Media	Extremas			
		Máxima	Fecha	Mínima	Fecha
Habana	761.75	772.67	Enero 19	753.87	Mayo 21
Cienfuegos †	761.49	771.65	Enero 19	753.87	Obre. 3
Puerto Príncipe	761.49	770.64	Enero 19	755.91	Obre. 3
Santiago de Cuba	760.73	768.35	Enero 19	754.13	Sbre. 13

Viento (metros por segundo)

ESTACIONES	Dirección predominante	Movimiento total en kilometros	Velocidad máxima	Dirección	Fecha
Habana	E.	157.925	21.5	E.	Julio 6
Cienfuegos †	NE.	73.065	14.3	SO.	Sbre. 9
Puerto Príncipe	NE.	98.128	*16.1	E.	Julio 20
Santiago de Cuba	N.	68.030	24.1	SE.	Sbre. 13

†Anotación incompleta.

*Ocurrido también después.